

A Work Project, presented as part of the requirements for the Award of a Master Degree in
Management from the NOVA – School of Business and Economics.

International Placement

Analysis of the German business market for a Nova School of Business and
Economics graduate student

Constança Maria Leitão Piló Líbano Monteiro

Student number 2229

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Professor Sara Alves

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Abstract

Changes in today's society led to the evolution of professional migrations and individual searches for more suitable professional opportunities and careers outside one's countries. International Placement is nowadays one of the world's biggest trends in higher education for the future ahead and an appealing demand of the Millennium generations. The following work project aims to study the German business market identifying the most attractive German companies and respective graduate programs for a Nova School of Business and Economics graduate student. The study's conclusion relies on concrete strategic suggestions regarding the implementation of the results and practical use of the outcome provided.

International Placement | Graduate students | German business market | Nova SBE

Context

International Placement

The present work project relies on the professional and social movement frequently seen nowadays known as International Placement, more precisely in the study of the German business market for a Graduate student of Nova School of Business and Economics (referred in the following study as Nova SBE).

International Placement consists on the act of placing someone in a certain position outside his or her country barriers as the process of finding employment outside one's country borders. The word Placement is also referred to as the will to find suitable accommodation or job position that suits the one in subject. The aim of the study is to elaborate a priority map and strategic actions to place Nova SBE master students outside Portuguese frontiers in the appropriate program and suitable international working position. Early in the research two

facts became clear: that International Placement and the movement of searching for better professional conditions outside one's own country is definitely becoming a bigger reality in today's society: many factors can be pointed out to justify this evidence, such as the increase of communication facilities and ease of sharing information that gave awareness to all different companies and programs, among many other aspects, that will be further analyze. The second evidence is that International Placement isn't yet a common expression among the professional environment as much as it should be in the year 2015: one curious aspect that appeared from my research is the lack of documents and online sources relating to the specific expression of International Placement as an educational and professional reality. As an interesting example I point out the non-existence of a web page referring to International Placement in one of the world's largest online encyclopedias - Wikipedia. This fact is only relevant for the knowledge that the International Placement movement and educational strategy is yet a technique to be adequately explored and studied.

While conducting the study it also became clear some of the factors that led the majority of the world's society, more specifically the Portuguese population, into a massive search for more appropriate international job positions. The first factor that can be pointed out is the exponential increase of the average life expectancy of men and women over the past decades. From 1970 to 2013 the life expectancy of men and women in Portugal increased from 67,1 to 80 years old.ⁱ Moreover, the extension of the retirement age of the Portuguese societyⁱⁱ led to an unforeseen and extremely high degree of saturation in many different sectors of our market. The social pyramid began its inversion from the normal triangle with a larger number of young people at the base to an inverse triangle with the biggest age group at the top, the older citizens. Another social factor related to the necessary openness of a "new" market is the increase in the number of students having a graduate degree in the past decades.ⁱⁱⁱ This fact simply made a twist in the demand and supply of professional job positions in our

country. Alongside with the decrease of jobs available (due to the higher demand from graduate students), a much more aggressive competitiveness between recent graduates came into the picture. Only one generation ago, any student with a high education degree would have a suitable place for him to work in Portugal that was adequate to his or her abilities and professional ambitions. Nowadays, things are no longer like that. Consequently, young professionals started to accept the reality that surrounded them and started looking for international job positions aiming for better working conditions and jobs more suitable to their abilities. Therefore, the presented theme is not only a valuable asset for our school as the ability to place our students more accurately outside Portugal's barriers but also a clear necessity of all men and women aiming to enter the professional market in 2015.

Nova School of Business and Economics

Nova SBE is the business school of the Universidade Nova de Lisboa. The Universidade Nova de Lisboa (UNL) is a higher education institution established in 1973, internationally recognized all over the world for its research and quality teaching. Back in the year of its foundation, the University adopted a new and challenging model within the so far seen Portuguese system that aimed essentially to stress interdisciplinary approaches, technological developments and to contribute to the social and economic development of the country. Since its inception, NOVA has aimed to innovate higher education in Portugal as a legal person in public law, with statutory, pedagogical, administrative and financial autonomy. The mission of the school can be highlighted in several points such as the clear will to produce graduates and postgraduates equipped for the marketplace and ready to face the challenges of their life careers; the recognized duty to serve the wider community and advance knowledge; thirdly, the ability of benefiting from the synergy of having an Economic, Financial and Management school all in the same place; and finally, the purpose of a carefully studied environment to bring prestige to Portugal, the students, the faculty, alumni and staff through international

recognition. Nova SBE University has strived for more than 30 years to accomplish a position in the Portuguese market that is capable of serving the surrounding market and benchmarking international standards and school practices. The specific strategic vision of placing itself among the best schools in Europe was the way to fulfill the greatest ambition and identified vocation of preparing its students to compete with graduates from international schools all over the European market. Furthermore, it was seen as a path to overcome the predicaments of Portugal's regional, cultural and economic confinement – “located at the south-west tip of Europe, landlocked from continental Europe by a powerful and aggressive neighbor and relatively poor.”^{iv} The faculty's vision is to place its strategic goals before every decision or every step towards the future. The will to be in the top 10 European Schools must have implications at many school levels like the recruitment processes, the student admissions, the development of the program offered as well as the course content and essentially the support and placement of all its students. Presently, the School is at an “export model” phase, whose aim is to compete in the market of “tradable” students, in other words, internationally mobile national and international students. At the current stage, the University states as the critical factors for achieving and building a reputable brand the following^v:

- Presence in the Financial Times (top 30) rankings – #28 in Europe in 2015
- An increase in the output of scientific research of an international standing
- Achieving the Triple Crown
- International recruitment and placement of Masters students – present work project
- The start of executive education activities in Angola

Since 1999, the official year of the ‘Bologna process’ declaration, a much more standardized shape of the so different business programs was implemented shaping the professional market. The face of business education was changed in order to promote the international mobility of students, professors and investigators as well as to increase the cooperation between European countries, guarantee quality standards and to promote the attractiveness of

the European Space in the high educational world.^{vi} All of these factors led Nova University to be able and desiring to attract more and more international students and to aspire to a highlight position in the European ranking of the greatest business schools. The success in the recruiting of foreign students in Nova SBE Masters program gave the school a higher responsibility in what concerns their most suitable placement.

Analysis of the German market

In the following chapter the targeted market of the presented work project – the German market - will be analyzed and the most relevant aspects highlighted to provide the necessary perspective and knowledge of the work to come. The selection of the German market over all other countries has its own credibility based on the business attractiveness of this European country and its particular growth over the past years as well as the high degree of notoriety that Nova SBE has gained among German students judging from the increasingly number of Masters students coming from Germany every year.

In order to deeply analyze the German market and to track the environment where the selected German companies operate in a PESTLE Analysis was made.^{vii}

The Federal Republic of Germany, currently known as Germany, consists of sixteen states located in the center of the European country. With its capital in Berlin and with 82.5 million inhabitants it is the most populous state of the European Union, followed by France. With an area of 357,021 square kilometers it has a high concentration of citizens per square km and a largely seasonal climate^{viii}. Germany has always been known as one of the leading political powers of Europe and also of the world. It is known as a technological pioneer and market leader in many different areas: from physics and chemistry to cars and consumer goods, ‘Germany is a world leader in innovation, boasting leading universities and research institutes alongside major engineering, IT and manufacturing industries.’^{ix} Germany is currently the 4th

largest economy in the world by Gross Domestic product and 1st in Europe. It is also the 5th world largest country by purchasing power parity and was also a founding member of the European Community in 1957, which became the European Union in 1993.

Political	<ul style="list-style-type: none"> • Federal parliamentary republic - dependent on the confidence of parliaments at national and subnational levels • Democratic country • Political system led by the Social Democratic Party and the Christian Democratic Union since 1949 • President – Joachim Gauck Chancellor – Angela Merkel
Economic	<ul style="list-style-type: none"> • Competitive and flexible economy • Openness to global trade and investment • One of the highest living standard of Europe • 16th freest economy in the world – 2015 Index
Social	<ul style="list-style-type: none"> • Modern and multicultural country • Religious and culturally open-minded • Modern immigrant society • Highest number of immigrants in the European Union • Most important reference – the family
Technological	<ul style="list-style-type: none"> • Automobile industry as the biggest strength • Pioneer in automobile innovations for the past decades • More Nobel prizes in the sciences than any other country in the 20th century
Legal	<ul style="list-style-type: none"> • Divided in three main groups: public law, private law and criminal law
Environmental	<ul style="list-style-type: none"> • Forerunner in climate and energy policies • Aware of the damages created so far and importance of reverting the environmental actual scenario

Table 1 – Germany PESTLE analysis. (For extended analysis go to Appendix 1)

Methodology

The present chapter aims to identify a work methodology capable of selecting the best German companies for a graduate student of Nova University. The question to be answered relied on the identification of the best market search methodology to highlight the best companies. The decision was made to select the biggest and most promising companies based in Germany: the choice was made upon the statistic reality that most Nova graduates haven't yet had a professional experience of any kind until the time of their graduation and for this reason, the knowledge that they have of their favorite industries or sectors appears to be limited and not accurately grounded. Another possible criteria were the selection of the best companies by sectors around Germany, but since it was proven more attractive to Nova students to begin their careers in a big and well-known company a different methodology was adopted. The presented methodology was introduced and explored by four different steps:

	Source	Methodology	# Companies
Step 1	2015 Forbes Global 2000	30 Biggest German companies	30
Step 2	Dax German Stock Index	30 German companies	35
Step 3	Availability of Graduate Programs	One excluded	34
Step 4	General Electric / McKinsey nine-box matrix	Final outcome	34

Table 2 – Methodology steps

Step 1 | The first criterion used to identify and select the pool of German companies was the Forbes Global 2000 rank. The ranking selects and places the world's 2000 biggest companies based on four distinct metrics: the amount of sales collected in the year in discussion; the value of the company's profits; the company's assets value; and the company's actual market value. It is a reference ranking that aggregates four of the most important metrics when analyzing and comparing companies alike. The four Key Performance Indicators are first

listed on separate lists of the “2000 biggest companies” in each of the metrics: Sales 2000, Profits 2000, Assets 2000, and Market value 2000. Every list has a minimum cutoff value that must be respected in order for a company to qualify.^x After that, every company receives a separate score for each metric based on where it ranks on the metric’s 2000 list. If a company ranks below any metric’s 2000 list cutoff, it receives a zero score for that metric assuring a high standard of results for every company. Furthermore, the scores are added up for all four metrics (equally weighted) and compile a composite score for each company based on their rankings. All the companies are sorted in descending order by the highest composite score. The highest composite score gets the highest rank. Since the chosen market is the German one, the 30 biggest German companies were selected and ranked as shown below.

Rank	Company	Industry	Rank	Company	Industry
1	Volkswagen Group	Automotive	16	Linde	Chemical
2	Allianz	Insurance	17	Henkel	Household/Personal Care
3	DaimlerAG	Automotive	18	Merck	Health care
4	BMW Group	Automotive	19	Talanx	Insurance
5	Siemens	Conglomerates	20	E.ON	Utilities
6	Deutsche Telekom	Telecommunications	21	ThyssenKrupp	Conglomerates
7	BASF	Chemical	22	Commerzbank	Banking
8	Munich Re	Insurance	23	Heidelberg Cement	Construction Materials
9	Bayer Group	Chemical	24	Evonik	Chemical
10	Deutsche Bank	Banking	25	Deutsche Boerse	Financials
11	SAP	Software & Services	26	Adidas	Sporting goods
12	Deutsche Post	Transportation	27	Porsche	Automotive
13	Continental	Automotive	28	Metro AG	Retailing
14	RWE Group	Utilities	29	EnBW-Energie Baden	Utilities
15	Fresenius	Health Care	30	Beiersdorf	Household/Personal Care

Table 3 – 30 Biggest German companies | Forbes Global 2000

Step 2 | The Deutscher Aktienindex is a blue chip stock market index consisting of the 30 major German companies trading on the Frankfurt Stock Exchange. DAX German stock index measures the performance of the Prime Standard’s 30 largest German companies in terms of order book volume and market capitalization.^{xi} It was considered relevant in the present work to rank and quantify better each company performance in the overall German

market. With the new metric chosen, the DAX 30 list was added to the previous Forbes 30 companies. By matching all of them, 5 new companies appeared and are now in the 35 list of the best German companies to analyze.

Rank	Name	Industry	DAX 30	Rank	Name	Industry	DAX 30
1	Volkswagen	Automotive	✓	18	Merck	Health Care	✓
2	Allianz	Insurance	✓	19	Talanx	Insurance	
3	Daimler	Automotive	✓	20	E.ON	Utilities	✓
4	BMW Group	Automotive	✓	21	Thyssenkrupp Group	Conglomerates	✓
5	Siemens	Conglomerates	✓	22	Commerzbank	Banking	✓
6	Deutsche Telekom	Telecommunications	✓	23	Heidelbergcement	Construction Materials	✓
7	BASF	Chemical	✓	24	Evonik	Chemical	
8	Munich Re	Insurance	✓	25	Deutsche Boerse	Financials	✓
9	Bayer	Chemical	✓	26	Adidas	Sporting goods	✓
10	Deutsche bank	Banking	✓	27	Porsche	Automotive	
11	SAP	Software & Services	✓	28	Metro Group	Retailing	
12	Deutsche Post	Transportation	✓	29	EnBW-Energie Baden	Utilities	
13	Continental	Automotive	✓	30	Beiersdorf	Household/Personal care	✓
14	RWE Group	Utilities	✓	31	K+s	Chemical	✓
15	Fresenius	Health Care	✓	32	Vonovia	Real estate	✓
16	Linde	Chemical	✓	33	Lufthansa	Airlines/Aviation	✓
17	Henkel	Household/Personal care	✓	34	Infineon Technologies	Technology	✓
				35	Fresenius Medical Care	Health Care	✓

Table 4 – 35 Greatest German companies according to Forbes and Dax Index

Step 3 | The following step was to identify which companies had a graduate program available for graduate students. From the 35 list of the best German companies to analyze only 1, Vonovia, didn't have a graduate program and was excluded from the study.

Step 4 | The fourth and final step was the composing of the General Electric / McKinsey nine-box matrix revealing the most attractive graduate programs and at the same time the degree of competitiveness of Nova students for that same program. The attractiveness level was defined by the companies' location, international perspective of the programs, number of different areas approached during the program and remuneration level. The competitiveness of the students' pool was defined by the knowledge of the German language, the ability to speak a second language (aside from English) and the grades level.

Graduate Programs

The following analysis will rely upon the Graduate Programs available at the 34 selected German companies and in its main characteristics. An online research was made mainly in the companies' web pages and specific career pages. No additional information was added to the results (like German students' knowledge and opinion of the company to be analyzed) in order to reflect exactly the information companies purposely release to the students and reflect a 100% unbiased research. At the same time resorting to the online company's websites was the most accurate way to guarantee the most updated information source of all.

The majority of the information and guidelines released by the companies was very similar to every one of them in type and format. The most common features mentioned were the **language requirements**; the **application method**, duration and important deadlines of the programs; features for the **required profile** of the candidates that include, **grade levels**, previous professional and international experience, readiness to go abroad and academic degree and area of study; and finally the main **areas** undertaken by the program such as Marketing and Sales, Finance or Logistics. The structure was always divided in program features information and profile requirements.

Location | The first information gathered from the companies was the location of their headquarters. Since the research aims to attract the best companies in the students' perspective the city where the graduate programs would take place was of high importance. Cities were gathered according to the urbanization degrees and divided into three distinct groups that will be further explained.

Languages | Going further in the companies' details one of the requirements stated out was the language every candidate must dominate in order to be considered for the program in the first place. Only two languages were mentioned, English and German. The great majority of

the companies say that English language is mandatory. However, in the present analysis the English language as mandatory will not be considered a constraint since 100% of Nova's masters' students have studied and graduated from an English language master program (at least) and so it can be assumed that all of them dominate the English language.

Graduate Programs	#	%
German language	14	41,18%
Mandatory	9	26,47%
Beneficial	5	14,71%

Table 5 – Graduate Program language requirements

Program features | Concerning the initial phase of recruiting and selecting – the application phase – it became clear that the channel all companies prefer to create awareness among the students is the online channel. Students are usually asked to send their applications through particular job portals and directly to the company's database. More broadly, several program features appeared as frequent information in the company's pages but in the other hand, proved to be very heterogenic between them. The referred features are the Application period, the starting date of the programs, and the duration period of each one. Application periods can vary from a specific month period like “from September to December” to some specific number of months prior the wishing entering date in the company – as mentioned 3 to 6 months before. Regarding the starting dates of the programs the answers vary from “every 1st and 16th of every month” to “1 of April and 1 of October every year” or even just mention the date for the following year like “1 of April 2016” without any mention to previous years. Once again it wasn't clear any kind of pattern in the information provided strong enough to come out with some guidance to the students. Concerning the duration period of the programs in study, the selected pool of companies varied between twelve months up to thirty-six months of maximum length time. The average time required to complete the program is 19,6

months – between 19 and 20 months. Common to all of the three features there was in some cases the option of an “on going” process, with no specific dates or schedules.

The last feature presented by the companies is their program field areas, where the program will have a higher focus. One interesting thing was that many companies have many different graduate programs in separately specific areas (like Finance or Marketing) instead of one global program with a rotating position process as is normally seen in Portugal. Besides that the other graduate programs showed a great diversity and variety of programs covered, the most popular ones being the Sales department, Marketing, Finance, Human resources, Operations and Logistics, IT and Business development and Strategy. The average number of programs covered by the programs is 5,27, which is a very attractive number for students about to have their first professional experience, like almost every Nova’s master student.

Graduate Programs	#	%
Program areas	34	100%
Single area programs	5	14,71%
1 to 3 areas	14	41,18%
4 to 6 areas	9	26,47%
7 to 11 areas	6	17,65%

Table 6 – Graduate Program language requirements

Profile features | Moving forward, the profile features are students main concerns and the only features that can be improved to become more competitive between programs. The first profile requirement covered is the prior Professional work experience the graduates have or should have. Regarding the professional work experience or Internships requirements it came out that less than fifty percent (sixteen companies) demand some prior professional experience to be a good candidate to the program. Aside from these sixteen companies, only one say it would be better not to have work experience by the time you apply to the program; four specify that if the student has worked before it should not be longer than three years and

finally two of them say that the maximum period of time a candidate should have been working is around one year time. Another very important aspect of any student graduating in the 21st century is the international experience they have. A relevant experience abroad, such as a semester studying outside your own country, working or traveling around the world, constitutes an almost mandatory characteristic of your academic years and life experience nowadays. From the data collected, almost 50% of all companies (sixteen) state that an international experience is a mandatory feature to be characterized as a proper applicant: four of them even say that the experience should have a minimum time period comprehended between four to twelve months of extension. None of the companies state a maximum time for the abroad experiences. Fourteen out of the thirty-four companies answer another topic regarding the readiness for international career and international assignments while in the graduate program. They all say students must be ready to go abroad if wanting to become suitable for the job position. The specified time of the assignments varies between three to six months traveling and working somewhere in the world.

Regarding the final grades, a general concern of all students during their time studying, thirteen out of thirty-four companies specify some standard to the candidate grades.

Graduate Programs	#	%
Grades	13	100%
Excellent	5	38,46%
Above average	8	61,54%

Table 7 – Graduate Program grades requirements

Finally some common patterns were perceived among the entire pool such as the extracurricular involvement required from the candidates in order to increase their chances to be chosen for a graduate position. Profile features like self-reliance, ability to work on own initiative, team skills, flexibility, mobility, high level of motivation and ability to act in an entrepreneurial manner are often demanded in the program forms.

A NOVASBE masters student

The following chapter of my dissertation relies on the profile of a Nova Masters student, the precise target population of this study. The presented analysis was based on information from the school online data source, Simplicity. It is important to highlight that the sample of the analysis cannot guarantee 100% veracity, since it is impossible to ensure that all students have made their personal login at the online platform or that all of the information introduced is entirely true. However, it is the most accurate information source available at the moment. The survey presented to the students was in a close answer model with limited possible options. Information from students graduating between the year 2014 and 2017 (last class entering the masters programs) was taken into consideration in order to provide a wide range of different classes and years and to standardize the student's actual profile. The three masters programs available at Nova University and represented in the study are the Masters in Management, Masters in Finance and Masters in Economics. At the same time, some of these students are CEMS MIM alumni.

This chapter purpose is to characterize those exact students throughout a diversity of topics provided. They are: the **student gender**; **nationality**; the **final GPA** of their masters program (or current GPA in 2016 classes); each student **geographical**, **industry sector** and **job area aspirations**; experience in **international mobility**; **language proficiencies** and **geographical expertise**; and finally information on their **undergraduate programs**.

Gender and types of masters | With a ratio of female/male students of 49,48% / 50,52% it stands clear Nova's effort to ensure equality in the recruitment process. Regarding the three masters programs mentioned before there is an evident ranking of popularity with the Masters in management in the first place, the second one the Finance masters and finally the master in Economics.

Graduates 2014-2017	#	%
Total number of students	1997	
Gender - total number of answers	1815	90,89%
Female	898	49,48%
Male	917	50,52%
Masters in Management	1268	63,50%
Masters in Management and CEMS MIM	100	5,01%
Masters in Finance	531	26,59%
Masters in Finance and CEMS MIM	52	2,60%
Masters in Economics	198	9,91%
Masters in Economics and CEMS MIM	6	0,30%
Total CEMS MIM	158	7,91%

Table 8 – Total number of students, Gender and type of Masters program

International students and languages | The number of international students has been increasing exponentially over the years. The average percentage of all four years in discussion is 33,15%. However, this year, within the 2017 graduating class, the percentage of international students reached 42,42%. The University masters program already counts with students from all over the world, as for example Albania, Azerbaijani, Serbia, New Zealand, Moldavia, Latvian, Kazakhstani, Israeli and Kenya. Among the innumerable nationalities (aside from Portuguese), most students come from Europe. The numbers related to the German population attending the Nova masters (42,15%) heavily support the attractiveness of the German market as a country of placement for our school and students.

Graduates 2014-2017	#	%
Average number of International students per year	662	33,15%
German	279	42,15%
Italian	115	17,37%
Polish	16	2,42%
Average number of languages spoken	2,705	-
Languages - total number of answers	1692	84,73%
German-speaking students	342	20,21%
Students speaking more than 2 languages	885	52,30%

Table 9 – International students, and languages spoken

GPA | The grades at Nova SBE are in a 0 to 20 scale.

Graduates 2014-2017	#	%
Grades - total number of answers	1273	63,75%
Average grade	15,64	-
Number of students with above average grades (>15,64)	665	52,24%

Table 10 – Student’s grades, average grade and above average students

Geographical and industry sector aspirations | The numbers were clear and 91,90% said they would want to work in Europe (not Portugal), making once again the German market a reality in the most attractive markets for Nova’s students. Only half of the students answered this question which makes its accuracy a little less precise and leaving some space for a higher deviance of results. However, 62,97% of the students that answered this question said they would aspire to work in consulting where 74,21% of those specified the consulting type area in a management/strategic area and 34,59% in financial services consulting.

Graduates 2014-2017	#	%		#	%
Geographical aspiration answers	1691	84,68%			
Europe (not Portugal)	1554	91,90%	South America	773	45,71%
Portugal	1416	83,74%	Australasia	652	38,56%
North America	1064	62,92%	Africa	391	23,12%
Asia	821	48,55%	Middle East	345	20,40%
Industry sector aspirations answers	1010	50,58%			
Consulting	636	62,97%	Automotive	112	11,09%
Consumer Goods	415	41,09%	Telecommunications	105	10,40%
Finance	395	39,11%	NGO / Non Profit	104	10,30%
International organizations	182	18,02%	Economic R&D	74	7,33%
Technology/Media	140	13,86%	IT/ Web services	53	5,25%
Private equity	118	11,68%	Education	45	4,46%

Table 11 – Student’s geographical and industry sector aspirations

International mobility and background | These international mobility experiences can be either from the CEMS MIM semester abroad, some exchange period or from a double degree format that invites students to study an entire year in a different country from Portugal. The value presented allows us to believe that students really want to expand their horizons and professional experience abroad by searching for an international placement strategy. This factor ensures once more the relevance of this theme and a certainly very practical use for the school especially for the students. The diversity of backgrounds shows Nova's effort to guarantee that students without any management background could also enter the program if proven to have high quality degrees in other different areas.

Graduates 2014-2017	#	%
International mobility during the Masters	556	27,84%
Undergraduate programs - answers	1660	83,12%
Management, Administration, Economics or Finance	1402	84,46%
Other	258	15,54%

Table 12 – Student's international mobility during the masters program and background

General Electric / McKinsey nine-box matrix

The following chapter relies on the theoretical and practical use of the General Electric / McKinsey nine-box matrix. The chosen framework appeared in the early 1970s and was conceived to support the process of analyzing different business portfolios of a company Business strategy unit (BSU). The final purpose of the GE / Mckinsey matrix is to identify the optimal business portfolio for a selected company. This optimal portfolio is one based on the company's relative business strengths and at the same time the one exploring the most attractive sectors or markets where the company performs. The main goals of the present framework are to analyze the actual business portfolio of specific company and decide which

BSU should receive more or less investment; to develop growing strategies; and to decide which businesses should not go on. The purpose analysis suggest that: for units above the diagonal, a company may pursue strategies of investment and growth; those along the diagonal may be candidates for selective investment; and for those below the diagonal might be best to be sold, liquidated, or run purely for cash. In the present work project I will be analyzing the attractiveness of the different graduate programs and the competitiveness of Nova students in those exact same programs with the help of the nine-box matrix.

Criteria

The first step behind the preparation of the matrix is to identify the criteria by which the Graduate Programs will be analyzed as well as the criteria by which Nova students will be classified as a competitive pool of candidates or not. The process to evaluate Nova students as competitive or not relied on the percentage of students that may be accepted as a candidate for each program regarding three specific measures: if they speak German, if they speak at least two different languages (English and another one) and if they have a grade level that meets the one required (for complete information see Table 7, Appendix 4). Moreover, after gathering all the information companies give on their programs (Chapter 4 – Graduate programs), four criteria stood out for their relevance upon their attractiveness level.

Location | The first one was the Location of the company's headquarters. It is clear that the city environment where we plan to work can influence the attractiveness of the program. The location by headquarters was selected due to the fact that the majority of the graduate programs have their full time period there. Therefore, the cities were ranked based on the size of the urban centers. Three distinct groups showed up and the final result was clear. The first group (the 5 biggest urban centers) includes the capital, Berlin, in the first place, Hamburg, Monique, Cologne and Frankfurt; the second group contains the following five German cities: Essen, Stuttgart, Dusseldorf, Hanover and Dresden. The final group (the least attractive one)

counts with cities like Bonn, Heidelberg, Kassel and Walldorf among others.^{xii} (Complete table presented in Appendix 2)

Program areas | The second evident criteria are the number of different program areas students will have the opportunity to deepen in each graduate program. Two main types of programs were immediately identified: the first type being the one area specific graduate programs, in other words, a program that will only approach one area (like Finance or Marketing) and the second type being the real trainee programs that aim to give the candidate a broader view of the company, having rotating positions in different areas from Logistics to Sales to Strategy or even Controlling. The programs were ranked accordingly with the recent survey “Are you Ready?” conducted by Nova to this year’s class of Masters students (detailed results from the study in Appendix 3). The survey asked the students how they valued some specific opportunities in their first work experience. From 367 answers the opportunity with the higher result was “Learning opportunity” scoring 3,77 in average out of 4. Therefore, we can assume that the most attractive programs are the ones that offer a bigger variety of business areas. The least attractive ones are those that have few areas of approach. Again, three groups were made based on their attractiveness level.

Program areas	
Group 1	11 to 7 areas
Group 2	6 to 4 areas
Group 3	< 3 and single area programs

Table 13 – Graduate program areas groups

The reason behind this attractiveness criterion is the fact that students looking for their first job search for a more broadening position than a specialized one. The more exposure they have to more areas the greater their competences development will be. In this early stage of their professional path, students look to develop competences for future positions, in other words, they look for a greater scope and not to taper their careers right from the beginning.

International perspective | The third criterion relies on the existence of an international perspective within the graduate programs. As mentioned before in Chapter 4 – Graduate Programs, some companies demand their candidate’s readiness to go abroad due to the existence of international assignments in their programs. Also from the latest survey conducted by Nova masters office, students answered that they valued 3,22 out of 4 the opportunity to have international exposure in their first job position. Consequently, programs with international exposure were perceived as more attractive than the ones not having it.

Remuneration | The fourth and final criterion is the remuneration associated with each company. No information was available regarding the compensation package of a graduate in the thirty-four graduate programs. However, the remuneration attributed to a Praktikant (Intern) is known for almost all companies in the study. Despite of the fact that the relation between the Intern’s salary and a graduate one in every company is not 100% accurate, the information was taken into account in order to rank the companies and divide them in groups according to their payment levels. The aim is not to extract which companies will pay more for a graduate position but to retain an average view of how attractive are the payments inside the different companies. Three groups were divided according to salary payments values:

Remuneration	
Group 1	$\geq 1000\text{€}$
Group 2	$900\text{€} \geq 999\text{€}$
Group 3	$700\text{€} \geq 899\text{€}$

Table 14 – Graduate programs remuneration groups

Weights

The second phase necessary to build the GE / McKinsey matrix is the weights attribution phase. The weights are one of the most important steps of the matrix because they will dictate how the companies will be distributed across the grid. They must be in accordance with the final aim of the study in order to provide a relevant outcome. The weights were decided once

again according to the “Are you ready?” survey, since it is the most accurate and recent information Nova can work with. The question posed was ‘On my first work experience I value...’ and the scale was from 1 to 4, being 1 ‘Not important at all’ and 4 ‘Very important’.

Learning opportunity	3,77
Career progression	3,51
International exposure	3,22
Recognized status (work for a well-known company)	3,02
Work-life balance	3,00
Remuneration	2,81
Stability	2,68

Table 15 – Students valorizations of first work experiences features – ‘Are you ready?’ survey results

Accordingly to these results the weights were attributed and in an attractiveness order they are now: Program areas with 35%, International perspective with 30%, Location with 20% and Remuneration with 15%.

Grades

The third and final phase relates to the grades. The grades were attributed accordingly to the GE/McKinsey criteria that divide the level of attractiveness in: High (from 7 to 10), Medium (from 4 to 7) and Low (from 1 to 4).

Company A					
Groups	Location - 0,2	Grades	Groups	Int. perspective - 0,3	Grades
Group 1	Urban centers with more than 600k habitants (5)	10	Group 1	Yes	10
Group 2	Urban centers with 400k up to 600k habitants (5)	7	Group 2	-	-
Group 3	Urban centers with less than 400k habitants	4	Group 3	No	4
	Program areas - 0,35			Remuneration - 0,15	
Group 1	11 to 7 areas	10	Group 1	≥ 1000€	10
Group 2	6 to 4 areas	7	Group 2	900€ ≥ 999€	7
Group 3	Less than 4 areas and single area program	4	Group 3	700€ ≥ 899€	4

Table 16 – Final table with Groups, Weights and Grades

The companies were evaluated and the final outcome is presented in the Matrix graphic:

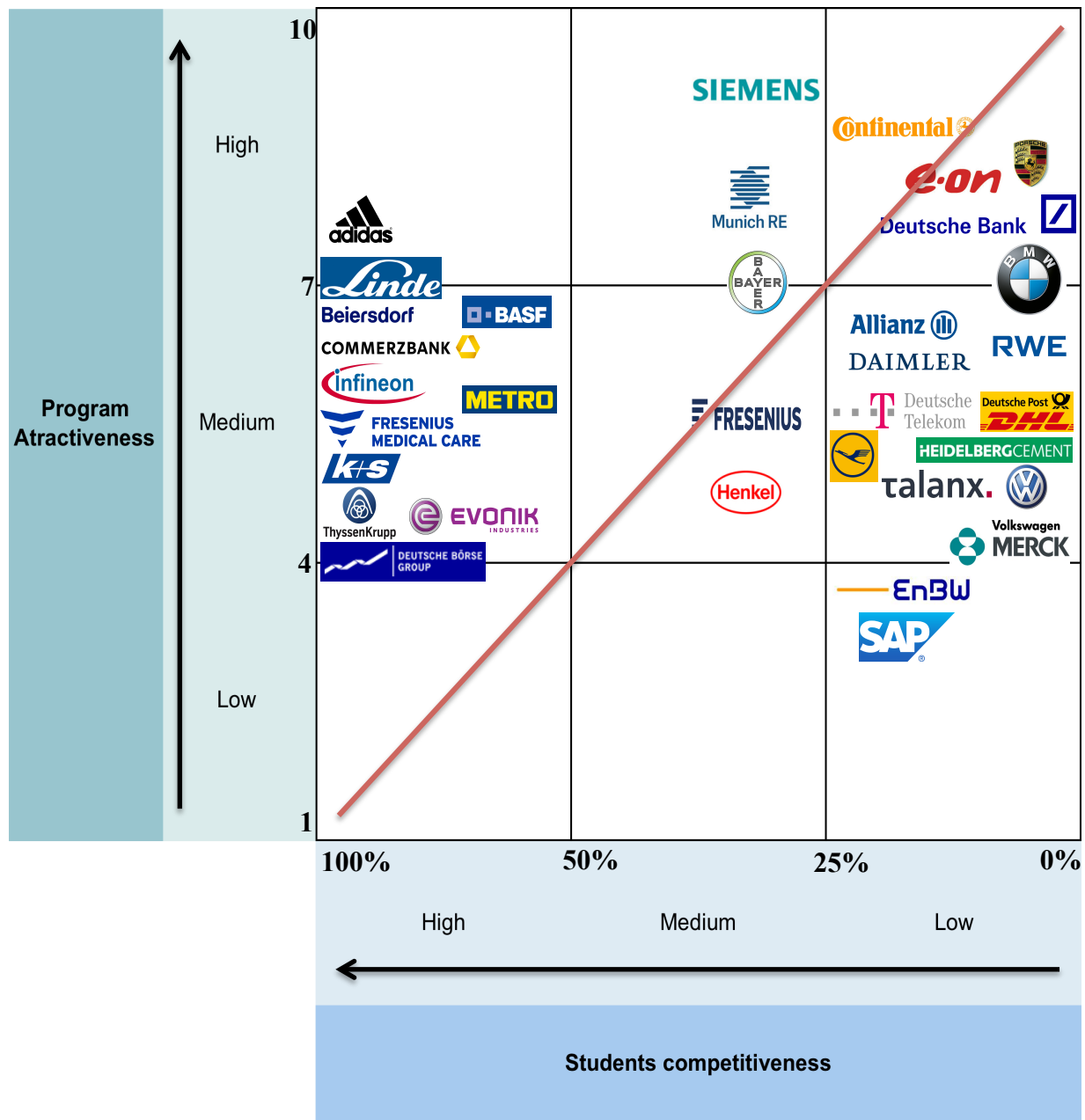


Table 17 – GE / McKinsey nine-box Matrix of the selected German companies (Further information regarding the Matrix in Appendix 4)

Regarding the analysis of the final result there are a few important aspects to highlight:

- The main features that make a company rely into a 25% or below **competitive** level is the demand for German and the excellent grades requirement.
- The main features that make a program less **attractive** are the non-existence of international exposure and the lack of different areas of approaching.
- There are sixteen companies out of the thirty-four demanding for German language.

Strategy and Suggestions

The final chapter of my work project is intended to identify the Top 3 Best companies for a Nova graduate student and to state the strategic moves for the next phase of Placement. It will be divided into two distinct branches: the strategy and consequential suggestions.

Strategy | The Top 3 companies rated at the highest level are: Adidas, Linde and Beisendorf. The three companies have a rate of 100% in what concerns the competitiveness of the students, which means that every masters student studying at Nova constitutes a valid candidate for each program, and a 6,7 or higher grade of attractiveness of the program, the highest grades of all. The strategy related with the absorption and implementation of the final outcome is directed to Nova SBE's educational work force and relies upon three main topics:

- 1. Direct contact with the companies** | This step is the most important one and must be carried out by Nova. The aim is to start building bridges and creating relationships in order to show them the Nova students as promising candidates for their programs.
- 2. Creating awareness among the students** | To increase the attractiveness of the international Placement strategy undertaken by the University students must be aware of the different opportunities in the appropriate companies per country or market.
- 3. Prepare the students and make them more competitive** | The goal is to give Nova students the best possible preparation to succeed in a foreign market like Germany.

Suggestions | The suggestions part of my work project has its own practicability due to the topic's relevance for the University and the need to implement new approaches. Each suggestion relates to the respective previous strategy topic.

1. Business trips | Increasing or diversifying the countries visited in business trips using this type of research to support the decisions and chose better the companies to visit based of the

Nova masters students-company match. Instead of visiting only the best companies in Germany, we will be visiting the best companies in German for a Nova Graduate student.

2. Online platform | Set up of an online platform where students can search for job positions and learn about graduate programs in specific countries. The idea is to have a global placement platform concentrating all information regarding placement in Portugal and foreign countries. Furthermore, to maximize its usage and suitable application the platform should have a two-way function when looking for professional placement: firstly students must be able to search for a graduate program by its own particular features, like the program's starting date, program areas or even required mandatory languages; secondly students must be able to introduce their main characteristics like master's final grade, job industries ambitions, spoken languages and professional experience and come up with the most suitable program for them. This will allow students to broaden their search and applications and to address the most suitable program for each career ambitions.

3. International modules | Creation of modules specialized in specific markets, like the German automobile market or just an overview of the German market. The implementation of these modules aims to increase the awareness of different markets among students and give them more tools to succeed in those environments. The idea is to give students the possibility to understand more about different countries and what it would be like to work there as well as what are their main sectors of activity are.

Entry survey | Build a better database about the students preferences and ambitions and consequently be able to conduct better the research for graduate programs in the different business markets. The will is to create a survey able to give a pattern of the students with the highest possible degree of accuracy. With the help of this survey and all the other suggestions, I believe International Placement will be a successful reality at Nova School of Business and Economics.

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(For the first KPI, the sales value, the value presented must be higher or equal \$4.16 billion; regarding the profits the minimum value required is \$267.0 million; for the company's assets \$8.57 billion and their market value should be higher or equal to \$5.49 billion. Furthermore, a company only needs to qualify for one of the lists in order to be eligible for the final Global 2000 ranking.)
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